

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF HAWAII

ILIO'ULAOKALANI COALITION, a ) CIVIL NO. 04-00502 DAE BMK  
Hawai'i nonprofit corporation;)  
NA 'IMI PONO, a Hawaii ) DECLARATION OF  
unincorporated association; ) LAWRENCE T. KAWASAKI  
and KIPUKA, a Hawaii )  
unincorporated association )  
)  
Plaintiffs, )  
)  
v. )  
)  
ROBERT GATES, Secretary of )  
Defense; and FRANCIS HARVEY; )  
Secretary of the United )  
States Department )  
of the Army )  
)  
Defendants. )  
\_\_\_\_\_  
)

DECLARATION OF LAWRENCE T. KAWASAKI

I, Lawrence T. Kawasaki, hereby declare that:

1. I am a Program Manager with the U.S. Army Corps of Engineers (USACE), Honolulu Engineer District, Hawaii. I have a Bachelor of Science degree in engineering and have over 23 years of experience in facilities design and construction. My last four years has been with the Honolulu Engineer District (HED).

2. HED is the Design and Construction Agent for Army and Air Force military construction (MILCON) projects in Hawaii. As the Stryker Brigade Combat Team (SBCT) Program Manager at HED, I am responsible for the coordination and

execution of all HED projects associated with the transformation of the 2<sup>nd</sup> Brigade, 25<sup>th</sup> Infantry Division (Light), US Army Hawaii, to a SBCT.

3. Military construction projects associated with the SBCT must comply with the Code of Federal Regulations, Title 40, Protection of Environment (40 CFR) and Section 402, Federal Water Pollution Control Act, as amended by the Clean Water Act of 1977. Since the Environmental Protection Agency delegated authority to the State of Hawaii to administer its National Pollutant Discharge Elimination System (NPDES) permit program in Hawaii, these projects must also comply with Hawaii Administrative Rules, Title 11, Chapter 54, Water Quality Standards, and Hawaii Administrative Rules, Title 11, Chapter 55, Water Pollution Control.

4. The State of Hawaii Department of Health (DOH) has issued NPDES permits for each of the SBCT projects currently under construction. As part of the permit process, site specific best management practices (BMPs) were submitted and accepted by the DOH prior to construction. These BMPs are typical of the construction BMPs used in Hawaii. The Army strictly adheres to these BMPs, which help to minimize soil erosion and adverse water quality impacts from the project sites. To date, SBCT construction contractors have received no notices of

violation of their NPDES permits for unmanaged erosion or adverse water quality impacts from the State of Hawaii.

Mr. Hood, the plaintiffs' hydrologist at no time states anything to the contrary.

5. The Army takes a proactive approach in managing its NPDES program. Army construction representatives together with their construction contractors periodically inspect the BMPs to ensure the BMPs continue to meet their desired function. If BMPs are not functioning well, the Army takes immediate actions to improve and/or correct the problem.

Revised BMPs are also submitted to the State of Hawaii. The Army has a designated Storm Water Program Manager who provides oversight, consultation, and periodic inspections of BMPs at the various construction sites. The Army's Storm Water Program Manager also invites the State of Hawaii, Department of Health, Clean Water Branch to accompany him on joint inspections of the project sites at least once each year.

6. Before discussing a few of the projects in detail, it is important to understand how the Hawaii Administrative Rules, Title 11, Chapter 55, Water Pollution Control defines certain terms. Section 11-55-01 indicates that BMPs are schedules of activities, prohibitions or designations of practices, maintenance procedures, and

other management practices to **prevent** or **reduce** the pollution of state waters. Appendix C, Guidelines for CWB NOI Form C, Paragraph 15.b. indicates that BMPs Plans describe methods to **minimize** erosion of soil and discharge of other pollutants into State waters and, after completion of the construction activity, removal procedures for the construction site BMPs. Section 11-55-02 (b) General Policy of Water Pollution Control states that any industrial, public, or private project or development which could be considered a new source of pollution or an increased source of pollution shall, in its initial project design and subsequent construction, provide the highest and best degree of waste treatment **practicable** under existing technology.

7. The SBCT Motor Pool.

a. Concern has been expressed by the plaintiffs' hydrologist that once this facility is paved and becomes impervious, water will flow across it and flash into the Waikale Stream, degrading the natural stream channels. The plaintiffs' hydrologist apparently did not know the extent of the storm water control system at the Motor Pool planned by the Army. In addition to the curb and gutter system, the Army plans to install inlet filters with absorbent packs to trap sedimentation and pollutants. The design also

includes construction of three concrete dissipaters that are designed to work in combination with exiting surge rock at the down slope end of the project site. Dissipaters are storm water channels that are designed to decrease the energy force in rushing water by blocking and splitting large water volumes into several smaller flows through the use of concrete baffles or walls staggered in the channel. Surge rock, also called riprap, is quarry rock that is placed in the flow path of the water, to further slow down water flows and to act as primary filters upon exiting of a water channel. After leaving the riprap, the water flows into a natural depression where it is slowed down again by a berm at the far end of the project site. On the other side of the berm is a natural vegetated forest area which extends approximately 2900 meters (9,500 feet) before it reaches Waikale Stream. This forested area will act as a natural filter to trap additional sedimentation. If construction is allowed to proceed, consideration will also be given to constructing speed bumps across the surface of the motor pool, in conjunction with curb outlets, to further slow and dissipate the sheet flow.

b. The plaintiff's hydrologist also indicated that without additional BMPs, there is a potential for more environmental damage from the completed state (paving the

parking area) than the unfinished state (current condition with base course only). He goes on to say that the area is of a gentle grade and he did not see any locations where there might be concentrated flows to move the gravels off site. As noted above, there are other BMPs (dissipaters, inlet filters, and absorbent packs) at the site that he was unaware of. If the area is left unfinished, water will continue to sheet flow off the site. While there might not be a concentrated flow to move larger gravel in the base course, there is enough flow to move the fines (extremely small gravel) within the base course off the site. There is evidence of this already happening. Paving the area will allow the curb and gutter system (with filters and absorbent packs) to work as designed, lessening the possibility of sedimentation and pollutants leaving the site. As such, paving the area is far better for the environment than leaving the areas unpaved and allowing the rainfall to percolate into the ground as recommended by the hydrologist.

8. Multiple Deployment Facility.

a. The plaintiff's hydrologist indicated that there was a series of detention basins on the west side of the runway that didn't seem to be designed correctly. Later he admits that he wasn't sure because he wasn't able to dig through

the drawings. Attachment One, Deposition of Andrew Hood, page 18, lines 6-10. The structure that he actually saw was a detention basin which is designed correctly. The volume of water going into the basin will be much higher than the volume leaving the basin. Until the final pavement is laid and the pavement is sloped to the drain inlets, however, the detention basin is basically serving as a sedimentation basin, trapping sediment before it flows to the outlet. Once the pavement is laid, the Army plans to install a rolled fabric barrier (in addition to the sandbags) in front of the 450mm pipe leaving the sedimentation basin, thereby reducing the runoff velocity further and filtering out sediment. The Army is also planning to provide floating boom(s) in the basin to filter out pollutants. Other BMPs discussed that might also be implemented, should this system fail, are placing plastic barriers or earthen berms across the bottom of the detention basin to provide a lag in the water flow or installation of inlet filters with absorbent packs to trap sedimentation and pollutants.

b. The Army is working on a separate project to protect the cultural site, Maunauna from erosion. While some of the dirt stockpiled at the base of Maunauna came from the MDF site, this project is no way associated with the

construction of the MDF. The Army concurs that BMPs need to be implemented at the stockpile and will take the necessary actions to mitigate the situation.

c. The other erosion problems identified by the plaintiff's hydrologist (1) head cut at the toe of the swale, (2) erosion at the outlet pipe of the detention basin, (3) improper use of the silt fence, and (4) high velocities in the swales were in the process of being improved when the injunction was issued on October 27, 2006. After a September 2006 rainfall which resulted in the head cut, a concrete block check dam was installed and the silt curtain barrier was restored. The erosion of the outlet pipe also occurred at the same time. To resolve that issue, a silt curtain barrier was restored and an additional silt curtain was installed. Since these improvements were completed, no additional head cut at the toe of the swale or erosion at the outlet pipe was observed during rainfalls in October and November 2006. The project designer was consulted and she recommended a long term solution to restore the swale to its preconstruction condition so that storm water sheet flow will resume its former pattern across and down the runway. The vegetation on the side of the runway will act as a natural filter for the sediment. She also recommended that the silt curtains

near the outlet pipe be replaced with an earthen berm. The contract modification to do this work was being coordinated when work on the project was enjoined. The Army also plans to add a gravel filled bag check dam fronting the silt curtain to improve that BMP measure.

d. The Army will continue to implement the necessary BMPs at the MDF to prevent or minimize sedimentation and pollutant runoff to flow into the stream.

10. Roads and Trails.

a. The Army has an ongoing range maintenance program to improve its roads and to implement BMPs to minimize erosion. The Army prioritizes this work based on training requirements, safety and impacts to the environment.

Unfortunately, during the winter of 2005-2006, Hawaii in general, and the island of Oahu in specific, received multiple rain storms over a 40 day period. Reports noted that this was one of the wettest times ever recorded. The saturation of the ground together with a weather pattern that approximately equivalent to a 50 year storm, severely degraded the East Range and Kahuku Training Areas. The Army submitted range assessments for Federal Disaster Funds and Congress allocated \$997,000 dollars to rehabilitate the range. The Army prioritized the work, with the highest priority given to safety and to correcting the areas where

major contributing sources of sediment could enter water bodies. The work to repair these areas are still ongoing. The plaintiffs' hydrologist is judging the Army's ability to maintain its BMPs at a time when the area just suffered a severe and unusual weather condition.

b. Beginning in April 2006, in preparation for Stryker training, a plan was implemented to rehabilitate 10 miles of the most used roads and trails at East Range. The plan and actual work was again prioritized to address road and trail conditions that posed a safety hazard and road or trail conditions that posed the greatest threat to the environment due to sedimentation. See Attachment Two Erosion Control Projects. This is an iterative process. Plans and funds continue to be programmed annually to maintain and improve the BMPs and quality of the access roads and trails at East Range and the Kahuku Training Area. To help evaluate and prioritize the work at these areas, the Army is using guidance from three sources: Environmental Protection Agency publication 841-B-97-009, July 1997, Techniques for Tracking, Evaluating, and Reporting the Implementation of Non-Point Source Control Measures, U.S. Forest Service Northeast Regional BMP Protocols, and the Range and Training Lands Assessment Range Assessment Protocols.

c. The plaintiff's hydrologist expressed concerns with inset ditches along the road that were actively downcut and he could see signs of recent sediment scouring and transport. Some transport of sediment in the swales at the edge of the roads is to be expected and is acceptable as long as the sediment does not enter the streams. The Army purposely cut paths into the vegetation along the roads to allow the water and sediment to flow there. In most areas the ground was slightly elevated toward the end of the path so the water had a stopping point. The vegetation in many of the areas acted as a natural filter for sediment. This was done at several intervals along both sides of the roads, increasing on downslope sections. The increase in intervals on downslope sections of the roads reduced the velocity and volume of water traveling down the road. This also reduced the amount of sediment transported and prevented the roads from flooding and/or failing at the bottom. The plaintiff's hydrologist indicated that, "BMPs that could capture sediments generated from those sites and store them onsite so they're not conveyed through the system and into the stream courses and stuff, would be effective BMPs." This is exactly what the Army has done with the numerous downcut areas into the vegetation, which is an acceptable BMP.

d. Regarding the observations of the Plaintiffs' hydrologist, they are based on a limited visit to (two days), and limited knowledge of the projects. Attachment One, page 13, lines 24-25; page 14, lines 1-25. He could not distinguish between impacts from Stryker vehicles and other wheeled vehicles. Instead, he assumed that some unquantified level of impacts associated with wheeled vehicles were caused by Stryker vehicles. Id., at page 15, lines 21-24. He notes generic forms of soil disturbance, but does not note any evidence of the migration of this soil into riparian area buffers or into water bodies. Id., at lines 12-17.

e. While the hydrologist opines that Stryker training increase over land flow leading to increased surficial erosion that would be transported down stream, he does not discuss the degree of this erosion or the level of impacts. He simply states it will occur. See e.g. Id., at page 25, lines 15-25. Additionally, he states that he thinks BMPs are not commensurate with the expected level of road use, but admits he does not know the actual level of use. Id., at page 30, line 14. The hydrologist notes that it is "nearly impossible" not to cause erosion from vehicle use. Id., at page 33, lines 11-16. Plaintiffs' hydrologist in no way quantifies any of the impacts he observes at any

location. He simply points to generic issues associated with any unimproved road system or construction project. Finally, plaintiffs' hydrologist notes that customization of the present BMPS and the addition of others would solve the sediment problems he associates with Stryker training. Id., at 18-23. As noted above, this is what the Army is doing in its iterative process of prioritizing and addressing erosion issues at East Range and Kahukus.

11. In summary, the Army coordinated with the State of Hawaii and obtained the necessary NPDES permits for all SBCT construction projects. The Army continues to be proactive in executing its NPDES program and its BMPs at East Range and the Kahuku Training Area. Finally, the Army will continue to work closely with the State of Hawaii and other agencies to ensure we prevent or minimize the erosion of soil and discharge of other pollutants into State waters.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge, information, and belief.

Executed on December 16, 2006.



LAWRENCE KAWASAKI